

What is claimed is:

1. A stereoscopic microscope, comprising:
  - 2 a light source section;
  - 3 an illumination optical system having an optical axis and including a projection optical system that forms a single image within the projection optical system and which irradiates a light flux from the light source section onto an observation object via the projection optical system;
  - 6 an observation optical system that includes an objective lens, left and right zooming optical systems for changing the magnification of the observation optical system, and left and right eyepiece optical systems;
  - 9 wherein
    - 10 a center position of said light source section is de-centered from the optical axis of the
    - 11 illumination optical system.
1. A stereoscopic microscope, comprising:
  - 2 a light source section;
  - 3 an observation optical system that includes an objective lens, left and right zooming optical systems for changing the magnification of the observation optical system, and left and right eyepiece optical systems;
  - 6 an illumination optical system that includes a reflecting member for leading the light flux from the light source section to an object, the reflecting member being inserted into and removed from a space on the object side of the objective optical system in conjunction with a zooming operation of the left and right zooming optical systems.

1       3. The stereoscopic microscope according to claim 2, wherein the reflecting member has two  
2       rounded notches for abutting peripheral portions of the light paths of the two observation light  
3       fluxes so as not to eclipse the light fluxes in these light paths.

1       4. The stereoscopic microscope according to claim 3, wherein the two rounded notches each  
2       encompass 120 degrees or more of curvature and at least the outer edges of the two rounded  
3       notches abut peripheral portions of the light fluxes.

1       5. The stereoscopic microscope according to claim 1, wherein the illumination optical system  
2       includes a variable magnification optical system for changing the range of the illumination field  
3       in conjunction with a change in magnification of the observation optical system.

1       6. The stereoscopic microscope according to claim 5, wherein  
2              the illumination optical system has a reflecting member for leading the light flux from  
3              the light source section to the object and the reflecting member is positioned in the vicinity of an  
4              image of the light source section; and  
5              the reflecting member is de-centered from the optical axis of the illumination optical  
6              system in a direction that is opposite to the direction that the center of the light source section is  
7              de-centered from the illumination optical system.

1       7. The stereoscopic microscope according to claim 1, wherein the de-centering amount of the  
2       center of the light source section relative to the illumination optical system is changeable.

1       8. The stereoscopic microscope according to claim 1, wherein:

2           an optical member with a non-circular output end is arranged near an image formation  
3         surface of the illumination optical system,  
4           the light source section includes a light guide, and  
5           the shape of the output end of the light guide is substantially similar to the non-circular  
6         shape of the output end of the optical member.

1         9. The stereoscopic microscope according to claim 3, wherein a reflection prevention member is  
2         affixed to the area of the reflecting member having the two rounded notches.

1         10. The stereoscopic microscope according to claim 9, wherein the reflection prevention  
2         member is a light shielding cloth.

1         11. The stereoscopic microscope according to claim 1, wherein the illumination optical system  
2         has a reflecting member that leads the light flux from the light source section to an object,  
3         the reflecting member being inserted into and removed from a space on the object side of the  
4         objective lens in conjunction with a zooming operation of the observation optical system.

1         12. The stereoscopic microscope according to claim 11, wherein the reflecting member has two  
2         rounded notches for abutting peripheral portions of the light paths of the two observation light  
3         fluxes so as not to eclipse the light fluxes in these light paths.

1         13. The stereoscopic microscope according to claim 12, wherein the two rounded notches each  
2         encompass 120 degrees or more of curvature.

1       14. The stereoscopic microscope according to claim 11, wherein the reflecting member is moved  
2       toward the object and toward the optical axis of the observation optical system when the  
3       observation magnification is changed from low magnification to high magnification.

1       15. The stereoscopic microscope according to claim 13, wherein the observation magnification  
2       is within a range of 7 to 25.

1       16. A stereoscopic microscope according to claim 2, wherein the reflecting member is moved  
2       toward the object and toward the optical axis of the observation optical system when the  
3       observation magnification is changed from low magnification to high magnification.

1       17. The stereoscopic microscope according to claim 4, wherein the observation magnification is  
2       within a range of 7 to 25.

1       18. The stereoscopic microscope according to claim 3, wherein the two rounded notches each  
2       encompass 120 degrees of curvature and continually abut peripheral portions of the light fluxes  
3       over 120 degrees of curvature at the maximum magnification of the observation optical system.